

PROJECT DESCRIPTION

I. GENERAL

This project involves modifying the south approach to allow thru traffic from East Avenue, provide a new pedestrian crossing modify the median and left turn lane on the west approach. The existing strain poles, pedestrian signals, controller and span wired will remain. New loop detectors and sampling loops will be installed.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA 8-phase, semi-actuated mode, with the North approach running separately and the South approach running as a free flow right-in/right-out.

III. CONTROLLER REQUIREMENT

- Reuse the fully-actuated, six-phase controller with one (1) four channel, time-delay-output loop detector amplifier, and associated harnesses housed in a NEMA size "6" base mounted cabinet. Also, furnish and install one (1) four channel, time-delay-output loop detector amplifier.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. LEE STARKLOFF  
ADE TRAFFIC  
(301) 513-7359

MR. DENNIS McMAHON  
ADE CONSTRUCTION  
(301) 513-7345

MR. RICHARD DAFF  
DIVISION CHIEF, TOD  
(410) 787-7630

MR. BOB GONZALES  
PROJECT ENGINEER, DPW  
(240) 777-8761

MR. EDWARD RODENHIZER  
CHIEF OF SIGNAL OPERATIONS  
(410) 787-7652

EQUIPMENT LIST B

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
8 SF	RELOCATE EXISTING OVERHEAD SIGN
1 EA	RELOCATE TRAFFIC SIGNAL HEAD
1100 LF	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR ALUM. SHIELDED (NO. 14 AWG)
260 LF	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (NO. 14 AWG)
230 LF	FURNISH AND INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO. 14 AWG)
90 LF	FURNISH AND INSTALL ELECTRICAL CABLE-STRANDED BARE CO. GR. WIRE (NO. 6 AWG)
180 LF	FURNISH AND INSTALL 1 IN. GALVANIZED CONDUIT (DETECTOR SLEEVE)
730 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (DETECTORS)
2450 LF	FURNISH AND INSTALL LOOP WIRE (NO. 14 AWG)
100 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (SLOTTED)
50 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED)
10 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED)
1 EA	FURNISH AND INSTALL 3 IN. SCHEDULE 80, 90 DEGREE CONDUIT (BEND)
3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
LS	REMOVE AND DISPOSE OF EXISTING MATERIALS (FOR THE ENTIRE PROJECT)
1 EA	FURNISH AND INSTALL 12/8 IN., ONE-WAY FIVE SECTION (Y.A.G.A.R.Y.G) BLACK-FACED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR SPAN WIRE MOUNTING
230 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
260 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
7 EACH	FURNISH AND INSTALL 3/4 IN. X 10 FT. GROUND ROD
750 LF	FURNISH AND INSTALL INTERCONNECT WIRE
1 EA	FURNISH AND INSTALL PEDESTAL POLE
2 EA	FURNISH AND INSTALL 12 IN., ONE-WAY, THREE SECTION (R.Y.G) BLACK-FACED TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR SPAN WIRE MOUNTING
1 EA	FURNISH AND INSTALL 12 IN., ONE-WAY, TWO SECTION (WALK, DON'T WALK) PEDESTRIAN SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR PEDESTAL POLE MOUNTING
1 EA	FURNISH AND INSTALL 12 IN., ONE-WAY, TWO SECTION (WALK, DON'T WALK) PEDESTRIAN SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR STRAIN POLE MOUNTING
2 EA	FURNISH AND INSTALL PEDESTRIAN PUSHBUTTON AND R10-4(2) SIGN - "PUSHBUTTON TO CROSS UNIVERSITY BLVD."
42.5 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS
	- 2 EACH ASSOC. SH. ASSEMBLY (24" X 51") - POLE MOUNT
	- 2 EACH ASSOC. SH. ASSEMBLY (36" X 75") - POLE MOUNT

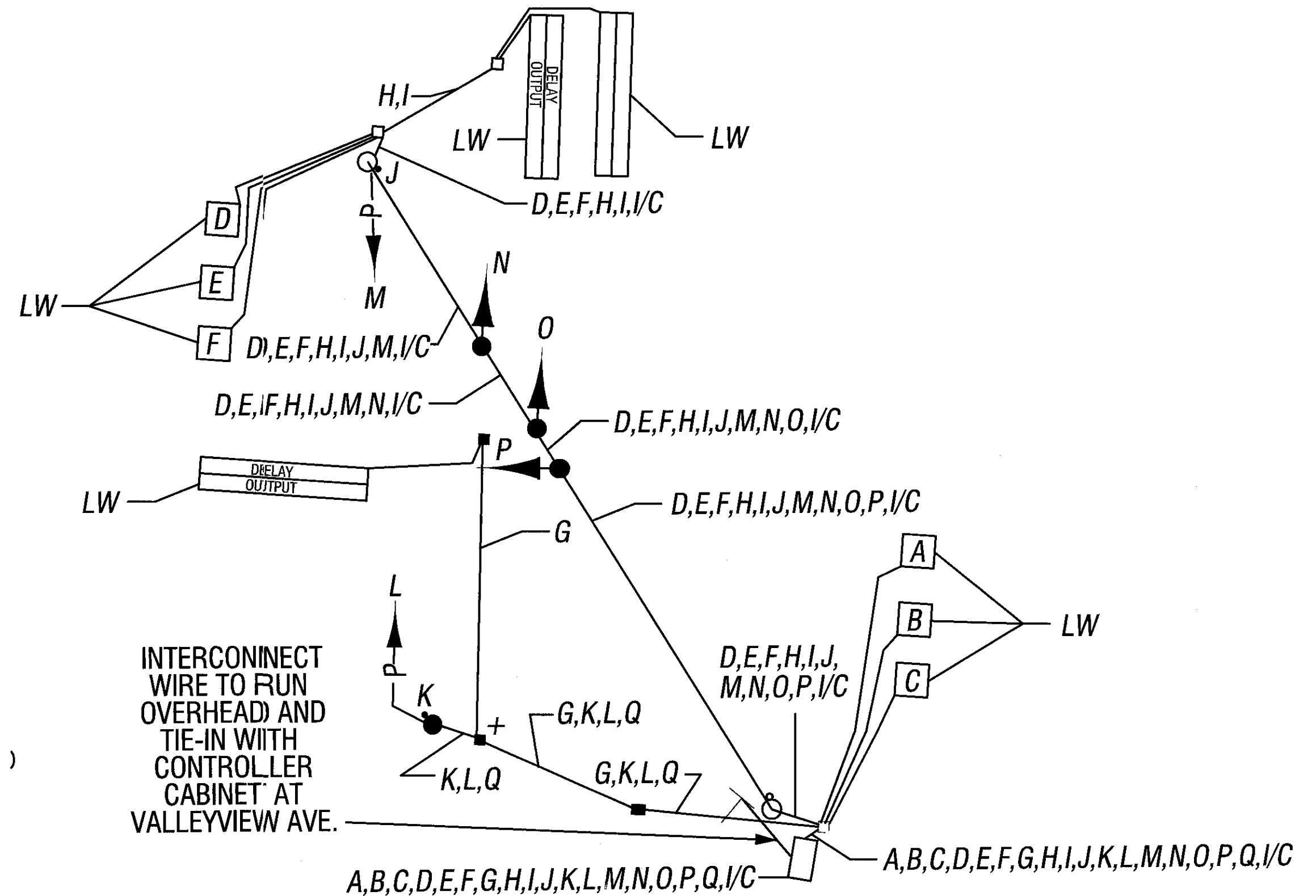
PHASING SEQUENCE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	
PHASE 01 + 06	G ←G→	G ←G→	G	R	R	R	R	DW	DW	DW	DW	DW	DW	↻
PHASE 01 CHANGE	G ←Y→	G ←Y→	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	↻
PHASE 02 & 06	G	G	G	G	G	R	R	WK	WK	DW	DW	DW	DW	↻
2 PED CLEAR	G	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW	DW	DW	↻
PHASE 02 & 06 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW	DW	DW	↻
PHASE 04	R	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW	↻
PHASE 04 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	↻
PHASE 04 ALT	R	R	R	R	R	G	G	DW	DW	WK	WK	WK	WK	↻
PED CLEAR	R	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	↻
PHASE 04 ALT CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	↻
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	↻

WIRING DIAGRAM

A,B,C,D,E,F,G,H,I  
J,K  
L,M  
N,O  
P  
Q  
I/C  
LW  
+

2-CONDUCTOR ELECTRICAL CABLE - ALUM. SH. (NO. 14 A.W.G.)  
2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)  
INTERCONNECT WIRE  
LOOP WIRE (NO. 14 A.W.G.)  
3/4 IN X 10 FT. GROUND ROD



TS-2

ENGINEERING-PLANNING-EARTH SCIENCES-SURVEYING  
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ROCKVILLE, MD - RALEIGH, NC - FREDERICKSBURG, VA - MECHANICSBURG, PA - ST. PETERSBURG, FL

REVISIONS
④ CONTRACT NO. BW996M82 RELOCATE NB MD 193 LEFT TURN LOOP DETECTOR AND PROVIDE NEW PAVEMENT MARKINGS DUE TO GEOMETRIC IMPROVEMENTS 5/03

<b>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION</b> <b>Office of Traffic &amp; Safety</b> <b>TRAFFIC ENGINEERING DESIGN DIVISION</b> <b>Traffic Signal Plan</b> <b>MD 193 AT EAST AVENUE</b>			
DRAWN BY: GEC	F.A.P. NO. BW996M82	TS NO. 2265A	SHEET NO. 2 OF 2
CHECKED BY: GEC	S.H.A. NO. MONTGOMERY	T.I.M.S. NO. F-443	
SCALE: 1" = 20'	LOG MILE: 15019301.13		
DATE: NOV. 19, 1986			